

## CLAIMS

1. A method for automatically discovering the shared Multimedia Service Capability, SMM Capability, of two user equipments (10,12) when initiating a voice call between two parties (A,B), one of the user's equipment (10), which is belonging to a calling party (A-user or A-subscriber) is capable of running simultaneously both a circuit switched voice call in a circuit switched network (CS,16), and a packet switched IP session supported by a packet switched network (18,PS), and at least one second user equipment (12), belonging to a called party (B-user or B-subscriber), which Multimedia Capability may be unknown to the calling party (A), and for discovering matching Multimedia Service Capability of the two user equipments (10,12) when initiating a voice call (step 102) over the circuit switched network (16) to the other user equipment the method is characterized in that it comprises following steps:
  - a. Receiving from means in the circuit switched network simultaneously a capability request for the two user equipments (10,12) to the packet switched network supporting the shared Multimedia service, SMM service (step 104);
  - b. Analysing the capability request by means in the packet switched network (step 106b);
  - c. responding simultaneously to said user equipments (10,12) information regarding matching SMM Capability, if at least one matching service is found (step 106c).
2. A method according to claim 1, characterized by the step of registering the supported SMM capabilities of the user equipment SMM capabilities in a SIP registration procedure towards an IMS element 50 of the user equipment's home packet switched network (28, home IMS, home PS) at user equipment power on (step 100).
3. A method according to claim 1 or 2, characterized in that steps a-c in claim 1 is performed by a SIP Application server for Shared Multimedia services (SMM-AS, 32).

4. A method according to any of claims 1-3, characterized in that a response is sent to both user equipments as a SIP message (sub-step 106c of step 106). .
5. A method according to any of claims 1-4, characterized in that the generation of capability requests by the means in the circuit switched network is based on IN technology or Parlay technology .
6. A system comprising a method for automatically discovering the common Multimedia Service Capability, SMM Capability according to claim 1, characterized in that it comprises:
  - a. Means for receiving from means in the circuit switched network simultaneously a capability request for the two user equipments (10,12) to the packet switched network supporting the shared Multimedia service, SMM service;
  - b. Means for analysing the capability request in the packet switched network;
  - c. Means for responding simultaneously to said user equipments (10,12) information regarding matching SMM Capability, if at least one matching service is found.
7. System according to claim 6, characterized by the system comprises means for registering the supported SMM capabilities of the user equipment SMM capabilities in a SIP registration procedure towards an IMS element 50 of the user equipment's home packet switched network (28, home IMS, home PS) at user equipment power on.
8. System according to claim 6 or 7, characterized in that the means of sections a-c in claim 5 is provided in a SIP Application server for Shared Multimedia services (SMM-AS, 32).
9. System according to any of claims 6-8, characterized in that, a response is sent to both user equipments as a SIP message.

10. System according to any of claims 6-9, characterized in that the generation of capability requests by the means in the circuit switched network is based on IN technology or Parlay technology.

5        11. A server (32) provided in a node of a system for automatically discovering the shared Multimedia Service Capability, SMM Capability, of two user equipments (10,12) when initiating a voice call between two parties (A,B), one of the user's equipment (10), which is belonging to a calling party (A-user or A-subscriber) is capable of running simultaneously both a circuit switched voice call in a circuit switched network (CS,16), and a packet switched IP session supported by a packet switched network (18,PS), and at least one second user equipment (12), belonging to a called party (B-user or B-subscriber), which Multimedia Capability may be unknown to the calling party (A), and for discovering matching Multimedia Service Capability of the two user equipments (10,12) when initiating a voice call (step 102) over the circuit switched network (16) to the other user equipment, is characterized in that it comprises:

- 10            a. Means for receiving from means in the circuit switched network simultaneously a capability request for the two user equipments (10,12) to the packet switched network supporting the shared Multimedia service, SMM service;
- 15            b. Means for analysing the capability request in the packet switched network;
- 20            c. Means for responding simultaneously to said user equipment s (10,12) information regarding matching SMM Capability, if at least one matching service is found.

25        12. Server (32) according to claim 9, characterized in that the server (32) is a SIP Application server for Shared Multimedia services (SMM-AS) situated in an IP Multimedia Subsystem IMS (28, home IMS).

30        13. Server (32) according to claim 10, characterized in that, a response is sent to both user equipments as a SIP message.

14. Server according to any of claims 11-13, characterized in that the generation of capability requests by the means in the circuit switched network is based on IN technology or Parlay technology.

5        15. A computer program product comprising computer executable software stored on a computer readable medium, the software being adapted to run at a computer or other processing means characterized in that when said computer executable software is loaded and read by said computer or other processing means, said computer or other processing means is able to perform the steps of the method according to any of claims 1-5.

10        16. A computer program product loadable into a network server, or in a separate server connected to a network server within the network, comprising the software code portions for performing the steps of any of claims 1-5

15        17. A computer program product stored on a computer usable medium, comprising readable program for causing a processing means within a network server, or in a separate server connected to a network server within a network to control the execution of the steps of any of claims 1-5.

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